



# Operando IV

First circular of the 4<sup>th</sup> International Congress  
on Operando Spectroscopy

Recent Developments and Future Perspectives  
in Spectroscopy of Working Catalysts

April 29 - May 3, 2012  
Brookhaven National Laboratory, Upton, NY, USA

## Scope and Invitation

The study of catalysts in their working state, the so-called in situ or operando approach, has become a well-established and critical research area in catalysis. In this methodology the behavior of working catalysts is probed using physico-chemical methods while simultaneously measuring the catalytic activity and selectivity. The operando approach is an excellent one to assess structure-activity relationships at the molecular level since structural and catalytic parameters are determined together.

We invite you to attend and contribute to the Fourth International Congress on Operando Spectroscopy, to be held at Brookhaven National Laboratory in April 2012. This congress follows on to the prior conferences in 2003 (Lunteren), 2006 (Toledo), and 2009 (Rostock).

This conference will cover all aspects of operando spectroscopy of catalysts: both heterogeneous and homogeneous catalysis, application of theory, new experimental approaches and techniques, time and spatial resolution, and combination of techniques. It is anticipated that there will be an emphasis on fuel cells, electro-catalysis, and catalysis related to the production of bio-fuels, and other energy-related areas where catalysis is playing a major role in renewable energy.

The program will comprise plenary lectures, invited keynote lectures, and contributed oral and poster presentations covering the whole field of catalysis. An exhibition of commercial products and equipment related to catalyst characterization will be held during the meeting.

Please add the conference dates to your calendar now, and join us at Brookhaven National Laboratory in April, 2012.

## Key Dates

April 29, 2011  
2<sup>nd</sup> circular and call for abstracts

October 1, 2011  
Abstract submission deadline

December 3, 2011  
Notification of acceptance

March 2, 2012  
Registration deadline

April 29, 2012  
Submission of manuscripts

April 29 - May 3, 2012  
Conference

## Further Info

Full Information about the  
Congress can be found at:  
<http://operandoIV.nsls.bnl.gov>





# Operando IV



## Venue

Situated on a 5,250-acre campus, Brookhaven National Laboratory – in Upton, New York – is part of Long Island's Central Pine Barrens region and home to 230 plant species, 15 animal species, and 85 species of birds. With innumerable restaurants, theaters, and internationally recognized sights of New York City 65 miles to the west, beautiful beaches stretching along the nearby coasts to the north and south, and an extensive array of vineyards and charming Hamptons towns to the east, Brookhaven offers visitors access to a little bit of everything.

## Vendor Exhibition

An exhibition of commercial products and equipment related to in situ and operando spectroscopy will be held during the meeting.

Companies wishing to exhibit their products at the meeting should contact Ms. Gretchen Cisco, [cisco@bnl.gov](mailto:cisco@bnl.gov).

## Further Information

Full information about the Congress can be found at: <http://operandoIV.nsls.bnl.gov>

## International Operando Committee

Prof. Dr. Angelika Brückner, LIKAT, Germany  
Prof. Miguel A. Bañares, ICP-CSIC, Madrid, Spain  
Dr. Frédéric Thibault-Starzyk, CNRS, Caen, France  
Prof. Eric Gaigneaux, Université Catholique de Louvain, Louvain-la-Neuve, Belgium  
Prof. Bert Weckhuysen, Utrecht University, Utrecht, The Netherlands  
Prof. Israel Wachs, Lehigh University, Lehigh, USA  
Dr. Simon R. Bare, UOP LLC, Des Plaines, USA

## Operando IV Scientific Advisory Panel

Dr. Radoslav Adzic, Brookhaven National Laboratory (BNL)  
Prof. Friederike Jentoft, University of Oklahoma  
Dr. Chuck Peden, Pacific Northwest National Laboratory  
Prof. John Rehr, University of Washington  
Prof. Fabio Riberio, Purdue University  
Dr. Steve Overbury, Oak Ridge National Laboratory  
Prof. Peter Stair, Northwestern University

## Operando IV Organizing Committee

Dr. Simon R. Bare (Chair), UOP (Honeywell)  
Prof. Chelsey Baertsch, Purdue University  
Ms. Gretchen Cisco, National Synchrotron Light Source, BNL  
Prof. Anatoly Frenkel, Yeshiva University  
Dr. Chris Marshall, Argonne National Laboratory  
Ms. Kathleen Nasta, National Synchrotron Light Source, BNL  
Dr. David Starr, Center for Functional Nanomaterials, BNL  
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